

C. Richard Attanasio

Research Division, Yorktown Heights, New York

Mr. Attanasio is a research staff member in the Computer Sciences Department, IBM Thomas J. Watson Research Center. He has been with IBM at Yorktown since 1965, when he joined as an application programmer in the computing center. He has been involved in various system programming activities, including CP-67 support, the first effort to adapt APL to OS/360, and a VM/370 penetration study, to which work Virtual Control Storage is a sequel. Currently he is involved in an experimental minicomputer project. Mr. Attanasio received his B.S. in physics from Fordham University in 1958 and his Sc.M. in physics from Brown University in 1961. Before joining IBM, he was a college instructor in physics and mathematics.

Walter J. Doherty

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Mr. Doherty joined IBM in 1960 in the Research Division. He worked on the Master Control Program, which was the operating system for the STRETCH computer from 1961 to 1963. He later did development in the field of Computer Assisted Instruction, and, as a result of this work, wrote the program product COURSEWRITER I. Since 1968, Mr. Doherty has worked on developing scheduling strategies for IBM interactive computing systems. He also developed instrumentation and performance measurement technologies and has used these developments to study the man-machine interface and human engineering aspects of computing. Mr. Doherty is currently manager of Systems Performance and Technology Transfer in the Computing Systems Department. He has been an adjunct faculty member at the IBM Systems Research Institute in New York City, a Distinguished Visitor for the IEEE Computer Society, and a National Lecturer for the ACM. He has received IBM Outstanding Contribution Awards for his work in Computer Assisted Instruction and scheduling strategies. Mr. Doherty received the B.S. degree at Manhattan College in mathematics and education in 1958 and the M.S. degree in mathematics at the New York University in 1965.

Authors

Timothy C. Hartmann

Data Systems Division, Poughkeepsie, New York

Mr. Hartmann is an Advisory Programmer in the I/S Application Program Development area in Poughkeepsie. He joined IBM in 1969 as a junior engineer. Since 1971, he has been involved in the development of telecommunications subsystems for virtual machines in CP-67 and VM/370. He coauthored both the Remote Spooling Communications Subsystem component of VM/370 and the VM/370 Networking PRPQ. He received the B.S. in electrical engineering from the University of Missouri at Rolla in 1969.

Edson C. Hendricks

Research Division, San Jose, California

Mr. Hendricks is a member of the staff of the San Jose Research Computing Facility. He worked at the Massachusetts Institute of Technology Computation Center beginning in 1966, and joined IBM as a staff member at the Cambridge Scientific

Center in 1968. Mr. Hendricks has participated in a wide variety of activities surrounding the design and development of CP-67, VM/370, and virtual machine subsystems. His work has often focused on the areas of telecommunications and networking, and the use of OS/360 in virtual machines. He coauthored both the Remote Spooling Communications Subsystem component of VM/370 and the VM/370 Networking PRPQ. Mr. Hendricks received the S.B. degree in electrical engineering from the Massachusetts Institute of Technology in 1967.

L. Howard Holley

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Mr. Holley is a staff member in the operating systems technology project at the IBM Cambridge Scientific Center. He joined the company in component quality engineering in East Fishkill, New York, in 1970. More recently, he worked as a systems engineer in the Data Processing Division's Boston Central branch office. Mr. Holley received his S.B. in physics from the Massachusetts Institute of Technology in 1967, and his M.S. in physics from Michigan State University in 1970.

Richard M. Jensen

Data Processing Division, Palo Alto, California

Mr. Jensen is an advisory systems engineer and large systems branch specialist in the DPD Palo Alto branch office. His primary responsibilities include VM/370, MVS and 303X processors. He joined IBM in 1967 in field engineering and had major support responsibilities for OS/MVT and CP-67. He was involved in the design of VM/370, and in the initial tests for its first release, and spent four years in the VM/370 development group. His responsibilities there ranged from the design of special-purpose programs, test drivers and hardware simulators to CP development (including VMCF). Since then, Mr. Jensen has been involved in systems engineering activities and had VM/370 support responsibilities at the San Jose Research Laboratory computing center where he developed a prototype real-time monitor for VM/370. He attended the University of Washington at Seattle and has an associate degree in electrical engineering.

Richard P. Kelisky

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Dr. Kelisky joined IBM as an Associate Mathematician in the Research Division at Yorktown Heights, New York in 1958. In 1961, as Assistant Director of the Computing Center, he was responsible for numerical analysis and for assignments of application programmers. For two years, beginning in 1963, he was Technical Assistant to the Director of the Department of Mathematical Sciences. As part of his IBM assignment (1965-1967) he was Visiting Associate Professor of Biomathematics at Cornell Graduate School of Medical Sciences. In March 1968, he was appointed Manager of Computing Services, Operations and Systems, and was promoted to Director of the Computing Systems Department in 1971. Dr. Kelisky received a B.S. degree in mathematics from Texas Technological College in 1951, and the M.A. and Ph.D. degrees in mathematics in 1953 and 1957 respectively from the University of Texas.

Richard A. MacKinnon

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Mr. MacKinnon has been manager of the IBM Cambridge Scientific Center since 1975. In addition, he is a visiting senior lecturer at MIT's Sloan School of Management, where he teaches a course in advanced operating systems, and he serves as adjunct professor of computer science and engineering at the Boston University College of Engineering. Mr. MacKinnon joined IBM in 1962 as a systems engineer working primarily in banking accounts and with early System/360 on-line teller installations. Subsequently he was a marketing representative. From 1967 to 1970 he was in Finance Industry development, working on customer information systems and a prototype VISAM access method. From 1970 to 1975 he was a regional systems support manager in the Data Processing Division, with responsibility for introducing System/370 and for technical support of virtual storage system control programs, data base/data communications products, interactive computing, and storage subsystems. He received his B.A. in 1960 from Yale University (magna cum laude, Phi Beta Kappa) and his M.B.A. in 1962 from Harvard's Graduate School of Business Administration.

Richard P. Parmelee

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Dr. Parmelee has been a staff member in the operating systems technology group at the IBM Cambridge Scientific Center since 1975. Prior to that he worked for three years at the French Scientific Center, where he managed a computer networking project. Dr. Parmelee originally joined the Cambridge Scientific Center in 1967 and worked on virtual machine systems (including CP-67) and computer networking. Before joining IBM he worked at MIT, where he received his Ph.D. in mechanical engineering in 1966.

Charles A. Salisbury

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Mr. Salisbury is a staff member in the operating systems technology group at IBM's Cambridge Scientific Center. He joined IBM in 1964 at the Kingston development laboratory, working in diagnostic engineering for graphic devices. Subsequently he worked in time sharing, real-time applications, and multiprocessing software as a systems engineer in Palo Alto, California. Since his transfer to Cambridge in 1969, he has been involved in the design and implementation of virtual machine systems on the System/360 Model 67 and System/370. Mr. Salisbury received his B.S. in electrical engineering from MIT in 1964.

David N. Saul

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Mr. Saul is a project manager at IBM's Cambridge Scientific Center, with responsibility for projects in operating system technology. He directed the effort to provide VM/370 multiprocessing support. Mr. Saul joined IBM in 1965 as a computer systems science trainee in the Boston Federal branch office. He held various systems engineering positions in support of large research customers before joining the District One System Design and Installation staff. There, and later at the Northeastern Region System Support Center, he provided installation support for MVS, multiprocessing, and complex systems. Mr. Saul received his B.S. and M.S. in aeronautics and astronautics from MIT.

Love H. Seawright

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Mrs. Seawright is project manager of distributed systems and intelligent terminals at the IBM Cambridge Scientific Center. She joined IBM in 1962 as a systems engineer in Memphis, Tennessee. From early 1968 through 1972, she worked in CP-67/CMS development and VM/370 development. From 1972 through 1976, she provided technical and marketing support on VM/370 in the Northeastern Region Market Support Center. In 1974 she received an IBM Outstanding Contribution Award for her technical and marketing contributions to virtual machine products. Mrs. Seawright received her B.A. in mathematics from the University of Mississippi in 1962.

William H. Tetzlaff

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Mr. Tetzlaff joined the Service Bureau Corporation in 1966. He joined the Research Division in 1969 as a Research Staff Member. Here he has done research in information retrieval and systems performance. Mr. Tetzlaff published several papers on that research, and received an IBM Outstanding Contribution Award for his work on systems performance. He studied engineering sciences at Northwestern University, Evanston, Illinois, and he is a graduate of the IBM Systems Research Institute in New York City. Mr. Tetzlaff is currently doing research in systems performance and capacity planning.